



San Francisco Bay Regional Water Quality Control Board

(Sent via email: wilson.kimberly@epa.gov)

January 25, 2019
File: CW-803476 and CW-717712

Ms. Kimberly Wilson
Office of Pesticide Programs Docket
Environmental Protection Agency Docket Center (28221T)
U.S. Environmental Protection Agency (U.S. EPA)
1200 Pennsylvania Ave., NW.
Washington, DC 20460-0001

Subject: Zinc and Zinc Salts – Draft Risk Assessment (EPA-HQ-OPP-2009-0011)

Dear Ms. Wilson:

Please accept these comments on the Draft Risk Assessment for zinc and zinc salts, which are used in swimming pools, spas, and hot tubs. The San Francisco Bay Regional Water Quality Control Board (Water Board) is the California State agency responsible for restoring, maintaining, and protecting the beneficial uses of surface and ground waters in the San Francisco Bay Region. To protect waters within our jurisdiction, we issue federal National Pollutant Discharge Elimination System (NPDES) permits to about 50 wastewater treatment plants and over 100 stormwater agencies. These permits require wastewater agencies (also known as publicly owned treatment works, or “POTWs”) to comply with effluent limitations to protect the beneficial uses of waters of the State. Stormwater agencies are required to take actions to prevent the discharge of pollutants, including pesticides, from their storm drain systems into waters of the State.

Beneficial uses of waters of the State can be threatened when pesticides are discharged from wastewater treatment plants or storm drains, neither of which can reliably treat for these pesticides. Further, pesticides in wastewater discharge can disrupt and kill the biological processes at the plants that are necessary to treat effluent to standards protective of receiving water quality.

The Water Board is particularly concerned that the Draft Risk Assessment assumed discharges of zinc-containing pool water would create “no major risk issues.”¹ It should be noted that it only takes the discharge of one zinc-containing swimming pool to exceed water quality standards for

¹ U.S. EPA OPP, Registration Review Draft Risk Assessment for Zinc and Zinc Salts, September 18, 2018

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zinc during low creek flow conditions (which occur during dry weather, the preferred time for pool maintenance).

The Water Board is not concerned about zinc and zinc salts discharges to sanitary sewers from treated pools, spas, and hot tubs. Our comments focus on the issue of draining location and flow rates when draining treated pools, spas, and hot tubs. We are writing to request that the label for zinc and zinc salts follows the precedent for improved labels for swimming pool, spa, and hot tub products that was established by the decisions of other pool, spa, and fountain chemicals, such as lithium hypochlorite and copper. In those Registration Review decisions, U.S. EPA worked carefully through the various issues to develop practical label language that mitigate possible aquatic impacts from discharge of treated pool, spa, and hot tub water, while preventing excess flows into sewer collection systems. We also fully concur with the comments on the Draft Risk Assessment for zinc and zinc salts submitted by the Bay Area Clean Water Agencies (BACWA) and encourage review of the enclosures in that letter.

Interest in Pool, Spa, and Hot Tub Pesticides

Pools may be emptied for cleaning every two to seven years and spas may be drained as often as every three months.² The water is discharged to storm drain systems, sanitary sewer lines flowing to wastewater treatment facilities, or surrounding landscaped areas. However, neither storm drain systems nor wastewater treatment facilities are necessarily prepared to handle the antimicrobial and conventional pesticides in water treated with zinc or zinc salts.

Due to concerns of these constituents flowing untreated to surface waters and the Clean Water Act NPDES permit requirements, many California stormwater agencies are directing pool, spa, hot tub, and fountain owners to discharge to their local sanitary sewer. Wastewater agencies support this practice because some constituents, such as pH and suspended solids, may be effectively reduced through treatment; however, wastewater treatment plants are not specifically designed to remove pesticides. Some antimicrobials, if discharged in sufficient quantities, have potential to interfere with the biological treatment processes at municipal wastewater treatment plants. Additionally, while some agencies have the resources to work with institutional, public and commercial swimming pool operators regarding swimming pool best management practices and the types of pool chemicals they use, most swimming pools are privately owned residential pools, the owners of which are not easily reached. With approximately 1.2 million in-ground pools in California and 5 million pools nationwide³, and countless more spas, hot tubs, and fountains, wastewater agencies have limited authority and resources to regulate the frequency, volume and constituents of discharges.

Our NPDES permits also require POTWs to prevent discharge of sewer collection system overflows into waters of the United States. While this is not a pesticide regulatory issue, high-flow swimming pool discharges to the sanitary sewer can cause a sewer backup, potentially spilling untreated sewage onto streets and into storm drains, which could also create an acute

² Pool Corp (2016). Frequently Asked Questions. Available at <http://www.swimmingpool.com/faq>.

³ P.K. Data, Inc. (2012). Phone conversation with staff member Joshua Darling, August 15, 2016.

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hazard. Maintaining low flow rates (e.g., discharge through a garden hose rather than a fire hose) prevents such problems.

Requests Revised Labeling as a Mitigation Measure

The Water Board requests that the current language be changed to match the lithium hypochlorite label, which would also provide consistent label language across pool, spa, and hot tub chemicals.

“Before draining a treated pool, spa, or hot tub, contact your local sanitary sewer and storm drain authorities and follow their discharge instructions. Do not discharge treated pool or spa water to any location that flows to a gutter or storm drain or natural water body unless discharge is allowed by state and local authorities.”

We have attached our comment letter on the proposed Registration Review decision for lithium hypochlorite, which details the importance of the discharge control label language – including the discharge prohibition in the second sentence.

For all swimming pool, spa, and hot tub products, including those containing zinc and zinc salts, we also recommend that the “Environmental Hazards” label statements be applied on the basis of product end use rather than product size. This would mimic EPA’s decision for lithium hypochlorite products. As explained in our attached lithium hypochlorite comments, this approach avoids potential conflicting language on product labels.

The Water Board thanks the U.S. EPA for the opportunity to offer feedback on the Draft Risk Assessment for zinc and zinc salts, and appreciates the important work the Office of Pesticide Programs does through the pesticide registration review process. For any questions, please contact Debbie Phan at debbie.phan@waterboards.ca.gov or (510) 622-2116 as needed.

Sincerely,



Debbie Phan
Water Resource Control Engineer

cc: *via email:*

Yu-Ting Guilaran, Director, Pesticide Re-Evaluation Division (guilaran.yu-ting@epa.gov)

Rick P. Keigwin, Jr., Director, EPA OPP (keigwin.richard@epa.gov)

Tracy Perry, EPA OPP Pesticide Re-Evaluation Division (perry.tracy@epa.gov)

Andrew Sawyers, Director, EPA Office of Water, Office of Wastewater Management
(sawyers.andrew@epa.gov)

Tomas Torres, Director, Water Division, EPA Region 9 (torres.tomas@epa.gov)

Richard Fehir, Risk Management Branch (RMB) II, Antimicrobials Div. (fehir.richard@epa.gov)

Rose Kyprianou, RMB II, Antimicrobials Div. (kyprianou.rose@epa.gov)

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David Bays, Risk Assess. and Science Support Branch, Antimicrobials Division
(bays.david@epa.gov)
James Breithaupt, Risk Assess. and Science Support Branch, Antimicrobials Division
(breithaupt.james@epa.gov)
Kathryn Korthauer, Risk Assess. and Science Support Branch, Antimicrobials Division
(korthauer.kathryn@epa.gov)
Siroos Mostaghimi, Risk Assess. and Science Support Branch, Antimicrobials Division
(mostaghimi.siroos@epa.gov)
Laura Parsons, Risk Assess. and Science Support Branch, Antimicrobials Division
(parsons.laura@epa.gov)
Debra Denton, EPA Region 9 (denton.debra@epa.gov)
Patti TenBrook, EPA Region 9 (tenbrook.patti@epa.gov)
Karen Mogus, California State Water Resources Control Board
(karen.mogus@waterboards.ca.gov)
Philip Crader, California State Water Resources Control Board
(phillip.crader@waterboards.ca.gov)
Paul Hann, California State Water Resources Control Board (paul.hann@waterboards.ca.gov)
Jodi Pontureri, California State Water Resources Control Board
(jodi.pontureri@waterboards.ca.gov)
Matthew Freese, California State Water Resources Control Board
(matthew.freese@waterboards.ca.gov)
Jennifer Teerlink, California Department of Pesticide Regulation (jennifer.teerlink@cdpr.ca.gov)
Chris Hornback, National Association of Clean Water Agencies (chornback@nacwa.org)
Cynthia Finley, National Association of Clean Water Agencies (cfinley@nacwa.org)